

## CLAIMS

### What is claimed is:

- 1  
1 1. A method for creating a workflow language, comprising the steps of:  
2 selecting an existing programming language; and,  
3 extending said existing programming language by adding workflow  
4 constructs to the existing language.
- 1 2. A method according to claim 1, wherein:  
2 the step of extending said existing programming language by adding  
3 workflow constructs further comprises embedding constructs defined by a  
4 second language in the existing programming language.
- 1 3. A method according to claim 1, wherein:  
2 the workflow constructs are selected from the group consisting of  
3 parallelism, asynchrony, loops over asynchronous events, and flexible language  
4 handling.
- 1 4. A method according to claim 1, wherein:  
2 the existing programming language is Java.
- 1 5. A method according to claim 2, wherein:  
2 the second language is XML.
- 1 6. A method according to claim 1, further comprising:  
2 allowing a user to define a virtual program with the extended  
3 programming language.
- 1 7. A method for utilizing a workflow language, comprising:  
2 creating a workflow definition using a workflow language, wherein the  
3 workflow language comprises existing programming language extended with  
4 workflow constructs defined by a second language.  
5 creating a workflow program comprising of said workflow definition.

- 1 8. A method according to claim 7, wherein:  
2 said workflow definition is added to an annotation of the workflow  
3 program.
- 1 9. A method according to claim 7, wherein:  
2 said workflow definition further comprises flow logic that references the  
3 variables of the workflow program.
- 1 10. A method according to claim 7, wherein:  
2 said workflow definition further comprises flow logic that references the  
3 methods of said workflow program.
- 1 11. A method according to claim 7, further comprising:  
2 providing ability for said workflow program to go dormant; and,  
3 providing ability to revive said dormant workflow program to the exact  
4 state the workflow program was in before going dormant.
- 1 12. A computer-readable medium, comprising:  
2 an existing programming language; and  
3 means for extending said existing programming language by adding  
4 workflow constructs defined by a second language to said existing  
5 programming language.
- 1 13. A computer program product for execution by a server computer for  
2 creating a workflow language, comprising:  
3 an existing programming language; and  
4 computer code for extending an existing programming language by  
5 adding workflow constructs defined by a second language to the existing  
6 programming language.
- 1 14. A system for creating a workflow language, comprising:  
2 an existing programming language; and  
3 means for extending an existing programming language by adding  
4 workflow constructs defined by a second language to the existing programming

5 language.

1 15. A computer system comprising:  
2 a processor;  
3 object code executed by said processor, said object code configured to:  
4 extend an existing programming language by adding workflow  
5 constructs defined by a second language to said existing programming  
6 language.

1 16. A computer data signal embodied in a transmission medium,  
2 comprising:  
3 a code segment including instructions to extend an existing  
4 programming language by adding workflow constructs defined by a second  
5 language to the existing programming language.

1 17. A system for handling the ordering of messages received in a program  
2 using a workflow language, comprising:  
3 a workflow language comprising of looping construct with ordering of  
4 messages received defined by a second language added to an existing  
5 programming language;  
6 a program written using said workflow language; and,  
7 a workflow container to handle ordering of said messages received in  
8 said program.

1 18. A system for utilizing a workflow language, comprising:  
2 a workflow definition created using a workflow language, wherein said  
3 workflow language comprises existing programming language extended with  
4 workflow constructs defined by a second language; and,  
5 means for creating a workflow program comprising of said workflow  
6 definition.

1 19. A system according to claim 18, further comprising:  
2 means for providing ability for said workflow program to go dormant;  
3 and,

4 means for providing ability to revive said dormant workflow program to  
5 exact state the program was in before going dormant.

1 20. A system according to claim 18, wherein:  
2 said workflow definition is added to an annotation of said workflow  
3 program.

1 21. A system according to claim 20, wherein:  
2 said workflow definition further comprises flow logic that references the  
3 variables of said workflow program.

1 22. A system according to claim 20, wherein:  
2 said workflow definition further comprises flow logic that references  
3 the methods of said workflow program.

1 23. A method for creating a workflow language, comprising the steps of:  
2 selecting Java programming language; and,  
3 extending said Java programming language by adding workflow  
4 constructs to said Java programming language, wherein said extending further  
5 comprises embedding said workflow constructs defined by XML in the Java  
6 programming language.

1 24. A system for creating a workflow language, comprising:  
2 Java programming language; and,  
3 means for extending said Java programming language by adding  
4 workflow constructs to said Java programming language, wherein said  
5 extending further comprises embedding said workflow constructs defined by  
6 XML in the Java programming language.

1 25. A system for utilizing a workflow language, comprising:  
2 a workflow definition created using a workflow language, wherein said  
3 workflow language comprises existing programming language extended with  
4 workflow constructs defined by a second language;

5 a workflow program comprising of said workflow definition; and  
6 a workflow engine executing said workflow program.

1 26. A method for utilizing a workflow language, comprising:  
2 creating a workflow definition using a workflow language, wherein said  
3 workflow language comprises existing programming language extended with  
4 workflow constructs defined by a second language; and  
5 creating a workflow program comprising of said workflow definition.

1 27. A method for utilizing a workflow language, comprising:  
2 selecting a workflow definition created using a workflow language,  
3 wherein said workflow language comprises existing programming language  
4 extended with workflow constructs defined by a second language; and  
5 using a workflow program comprising of said workflow definition.

1 28. A computer program product created utilizing a workflow language,  
2 comprising:  
3 a workflow definition created using a workflow language, wherein said  
4 workflow language comprises existing programming language extended with  
5 workflow constructs defined by a second language; and  
6 a workflow program comprising of said workflow definition.